Please amend the claims to read as indicated in the following list of claims:

1. [Currently amended] A gain medium comprising:

a substrate;

a reflecting layer disposed on said substrate; and

a layer of gain material disposed on said reflecting layer, said layer of gain material comprising a plurality of optical gain regions and a plurality of optical lossy regions, said plurality of optical lossy regions being lossy at a signal wavelength of the gain medium and isolating the plurality of optical gain regions from one another.

2. [Currently amended] The gain medium of claim 1 wherein said plurality of optical gain regions are ion-doped regions.

3. [Currently amended] The gain medium of claim 1 wherein said plurality of optical lossy regions are trenches with roughened sidewalls for enhancing scattering light thereat out of said layer of gain material.

4. [Original] The gain medium of claim 3 wherein the trenches each have a width which is selected to facilitate the scattering of light at a signal wavelength of the gain medium.

5. [Currently amended] The gain medium of claim 1 wherein said plurality of optical lossy regions comprise ~~is~~ optically damaged regions enhancing scattering and/or

adsorption of light thereat from said layer of gain material.

6. [Original] The gain medium of claim 1, wherein said gain medium is optically pumped.

7. [Original] A method of minimizing the potential for parasitic oscillation modes and amplified spontaneous emissions, comprising:

fabricating a monolithic gain element; and

partitioning said monolithic gain element into a plurality of gain regions and lossy regions, the lossy regions scattering light away from monolithic gain element in order to minimize the creation of localized hot spots when the monolithic gain element is pumped by an optical source.

8. [Original] The method of claim 7 wherein said partitioning comprises ion doping to form gain regions.

9. [Original] The method of claim 7 wherein said partitioning further comprises etching trenches in said gain element, said trenches having roughened sidewalls to thereby form said lossy regions.

10. [Original] The method of claim 7 wherein said partitioning comprises ion doping to form lossy regions.

11. [Original] A laser system, comprising:

an input signal beam;

at least one pumping source; and

at least one monolithic gain medium element pumped by said at least one pumping source in order to amplify said input signal beam to produce an amplified output signal beam, the monolithic gain medium element having a substrate; a reflecting layer disposed on said substrate; and a layer of gain material comprising a plurality of gain regions and a plurality of lossy regions, said plurality of lossy regions isolating the plurality of gain regions from one another.

12. [Original] The laser system of claim 11 wherein said gain regions are ion doped regions.

13. [Original] The laser system of claim 11 wherein said lossy regions comprise trenches with roughened sidewalls for enhancing scattering light thereat out of said layer of gain material.

14. [Original] The laser system of claim 13 wherein the trenches each have a width which is selected to facilitate the scattering of light at a signal wavelength of the gain medium.

15. [Original] The laser system of claim 11 wherein said lossy regions are optically damaged regions enhancing scattering and/or absorption of light thereat from said layer of gain material.

16. The laser system of claim 11 wherein said gain medium element is optically pumped.

17. [Original] A laser system comprising:

an input signal beam;

at least one pumping source;

a plurality of monolithic gain medium elements forming a planar array having a lossy configuration to minimize modes of operation that are substantially transverse to the planar array, while maintaining a high-gain path for a mode of operation that is substantially normal to the planar array; and

a plurality of amplifier stages, each of the amplifier stages comprising said plurality of monolithic gain medium elements, a subsequent amplifier stage comprising at least one second said monolithic gain medium element, and each of said plurality of monolithic gain medium elements being adapted to receive the input signal beam, being pumped by said at least one pumping source, and being partitioned into gain regions and lossy regions in order to amplify said input signal beam to produce the amplified output signal beam.

18. [Original] The laser system of claim 17 wherein said gain regions are ion doped regions.

19. [Original] The laser system of claim 17 wherein said lossy regions are trenches with roughened sidewalls for enhancing scattering light thereat out of said layer of gain material.

20. [Original] The laser system of claim 17 wherein said lossy regions are optically damaged regions.

21. [Original] The laser system of claim 17 wherein the trenches each have a width which is selected to facilitate the scattering of light at a signal wavelength of the gain medium.

22. [Original] The laser system of claim 17 wherein said lossy regions are optically damaged regions enhancing scattering and/or absorption of light thereat from said layer of gain material.

23. [Original] The laser system of claim 17, wherein said gain medium is optically pumped.